

ABSTRACT OF THE DISCLOSURE

A method and apparatus for transferring data between a main volatile memory and a backup memory in a redundant system comprised of a main sub-system and a mirror sub-system is provided. For the purpose of preserving uninterruptible power supply energy, data is continuously transferred to back-up memory which may be a corresponding volatile memory of the mirror sub-system, or a non-volatile memory of the main sub-system. The method further includes the steps of detecting a loss of system power, transferring data from volatile memory to non-volatile memory, and turning off the power supply of the non-volatile memory module. The method is capable of detecting the status of the uninterruptible power supply of the mirror system and if that system is operative then only data not previously backed up is transferred to main non-volatile memory; otherwise, if a power failure is detected in both sub-systems all data in volatile memory, not previously written to non-volatile memory is transferred to non-volatile memory.